



MATERNAL MORTALITY

State Summary

MATERNAL MORTALITY

INTRODUCTION

Purpose of Surveillance

Maternal mortality is defined as deaths from puerperal causes, i.e. complications of pregnancy, childbirth, and the period after childbirth. These deaths can be related to previously existing maternal health problems, or they can occur from acute conditions arising during pregnancy, labor, or delivery. Such deaths are influenced not only by access to and adequacy of a woman's obstetric care, but also by her age, nutritional status, and socioeconomic level. Comparisons of maternal mortality rates among populations help to identify pregnant women at risk of dying from complications of pregnancy or childbirth, so proactive measures (educational, nutritional, etc.) can be taken to minimize the risk.

Source of Data: Certificate of Death

Maternal mortality information presented in this report is gathered from data recorded on the *Certificate of Death* for deaths that occurred to Louisiana residents in the 1999 calendar year. All original death certificates flow to the Vital Records Registry in New Orleans.

Data are recorded on death certificates by funeral directors, who solicit demographic information from available next of kin, and by physicians or coroners, who record information on time, place, and cause of death. Louisiana law requires that death certificates be sent by funeral directors to the Vital Records Registry within five days of occurrence, and that the identities of persons included in the death registry be kept confidential.

Death statistics are compiled in accordance with World Health Organization (WHO) regulations, which require member nations to classify causes of death according to the revision of the International Statistical Classification of Diseases, Injuries, and Causes of Death in effect at the time of death. Deaths that occurred in 1999 are coded in accordance with the tenth revision (ICD-10).

All of the causes of death described in this report are **underlying causes of death**, defined as the disease or injury that initiated the sequence of events leading to death. Secondary causes of death, which also are recorded on the death certificate, are not presented in this report.

Unless otherwise noted, all statistics reported here are for deaths to Louisiana residents, regardless of the state in which the death occurred. The Vital Statistics Cooperative Program, a nationwide system of information interchange among all states and territories, makes possible the reporting of out-of-state deaths to Louisiana residents.

Death registration in Louisiana is considered to be 100% complete, since a death certificate must be filed before a burial permit may be obtained. Surveys indicate, however, that some deaths caused by violent abuse sustained by women as a result of pregnancy are not coded as pregnancy-related deaths. Misidentification of cause of death is thought to result in under-reporting of maternal deaths.

MATERNAL MORTALITY COUNTS AND RATES

In 1999 in Louisiana there were 8 maternal deaths. Of these 6 women were black.

Louisiana's 1999 maternal mortality rate was 11.9 deaths per 100,000 live births. Between 1990 and 1999, 68 women died from pregnancy and childbearing-related causes (*Table MM1*).

The **maternal mortality rate** measures deaths of women due to

complications of pregnancy and childbirth. The rate is calculated by dividing the number of maternal deaths in given time period by the number of live births in that same time period, then multiplying the quotient by 100,000.

Because maternal deaths occur infrequently, they are expressed as deaths per 100,000 live births. Ideally, the rate should be calculated by dividing

the number of deaths by the number of pregnancies, but no system exists for gathering information regarding all pregnancies. The number of live births is used as an estimate of the number of pregnancies.

Care must be taken when comparing maternal mortality rates from year to year, because of substantial fluctuation in these rates due to the small number of deaths.

**Table MM1. Counts and Rates for Maternal Deaths by Race and Age
Louisiana, 1990-1999**

	All Races		Number of Maternal Death by Age Group															
			White								Black							
Year	Rate*	Number	15-19	20-24	25-29	30-34	35-39	40-44	45 +	All	15-19	20-24	25-29	30-34	35-39	40-44	45+	All
1990	11.1	8	-	**	-	**	-		-	**	-	**	-	**	-	**	-	6
1991	16.6	12	**	**	**	**	**		-	6	**	**	**	**	**	-	-	6
1992	2.8	**	-	-	-	**	-		-	**	-	**	-	-	-	-	-	**
1993	18.8	13	-	**	**	-	-		-	**	**	**	**	**	**	-	-	9
1994	10.3	7	-	-	-	-	-		-	0	**	**	**	**	**	-	-	7
1995	6.1	**	-	**	-	-	-		-	**	-	**	**	-	-	-	-	**
1996	12.3	8	**	-	-	-	-		-	**	**	**	-	**	**	-	-	7
1997	6.1	**	-	**	-	-	-		**	**	-	-	**	-	-	-	-	**
1998	3.0	**	-	-	-	-	-	-	-	0	-	-	-	-	**	-	-	**
1999	11.9	8	-	-	-	-	**	-	-	**	**	**	**	-	-	**	-	6
1990-1999	-	68	**	7	**	**	**		**	19	5	12	11	10	8	**	-	48

*Rate per 100,000 live births. Rates are unstable to small frequency of occurrence.

*** in cell indicates count is greater than 0 and less than 5

MATERNAL MORTALITY CAUSE OF DEATH

Table MM2 provides detailed counts of Louisiana's 1999 maternal deaths by cause and demographic group.

**Table MM2. Maternal Deaths By Cause, Race And Age
Louisiana, 1999**

Cause of Death	Rate*	Race	Age									
			Total	Lt 15	15-19	20-24	25-29	30-34	35-39	40-44	45+	Unk.
Total (O00-O95, O98-O99, A34)	11.9	All	8	-	**	**	**	-	**	**	-	-
	5.2	White	**	-	-	-	-	-	**	-	-	-
	22.0	Black	6	-	**	**	**	-	-	**	-	-
	-	Other	-	-	-	-	-	-	-	-	-	-
Pregnancy with abortive outcome (O00-O07)	1.5	All	**	-	**	-	-	-	-	-	-	-
	-	White	-	-	-	-	-	-	-	-	-	-
	3.7	Black	**	-	**	-	-	-	-	-	-	-
	-	Other	-	-	-	-	-	-	-	-	-	-
Ectopic pregnancy (O00)	-	All	-	-	-	-	-	-	-	-	-	-
	-	White	-	-	-	-	-	-	-	-	-	-
	-	Black	-	-	-	-	-	-	-	-	-	-
	-	Other	-	-	-	-	-	-	-	-	-	-
Spontaneous abortion (O03)	-	All	-	-	-	-	-	-	-	-	-	-
	-	White	-	-	-	-	-	-	-	-	-	-
	-	Black	-	-	-	-	-	-	-	-	-	-
	-	Other	-	-	-	-	-	-	-	-	-	-
Medical abortion (O04)	-	All	-	-	-	-	-	-	-	-	-	-
	-	White	-	-	-	-	-	-	-	-	-	-
	-	Black	-	-	-	-	-	-	-	-	-	-
	-	Other	-	-	-	-	-	-	-	-	-	-
Other abortion (O05)	-	All	-	-	-	-	-	-	-	-	-	-
	-	White	-	-	-	-	-	-	-	-	-	-
	-	Black	-	-	-	-	-	-	-	-	-	-
	-	Other	-	-	-	-	-	-	-	-	-	-
Other and unspecified pregnancy with abortive Outcome (O01-O02, O06-O07)	1.5	All	**	-	**	-	-	-	-	-	-	-
	-	White	-	-	-	-	-	-	-	-	-	-
	3.7	Black	**	-	**	-	-	-	-	-	-	-
	-	Other	-	-	-	-	-	-	-	-	-	-
Other direct obstetric Deaths (A34, O10-O92)	10.4	All	7	-	-	**	**	-	**	**	-	-
	5.2	White	**	-	-	-	-	-	**	-	-	-
	18.4	Black	5	-	-	-	-	-	-	**	-	-
	-	Other	-	-	-	**	**	-	-	-	-	-
Eclampsia and pre- Eclampsia (O11, O13-O16)	4.5	All	**	-	-	**	**	-	-	**	-	-
	-	White	-	-	-	-	-	-	-	-	-	-
	11.0	Black	**	-	-	**	**	-	-	**	-	-
	-	Other	-	-	-	-	-	-	-	-	-	-

Table MM2. Maternal Deaths By Cause, Race And Age
Louisiana, 1999

Cause of Death	Rate*	Race	Age									
			Total	Lt 15	15-19	20-24	25-29	30-34	35-39	40-44	45+	Unk.
Hemorrhage of pregnancy and childbirth and placenta previa (O20,O44,O45,O46,O67,O72)		- All	-	-	-	-	-	-	-	-	-	-
		- White	-	-	-	-	-	-	-	-	-	-
		- Black	-	-	-	-	-	-	-	-	-	-
		- Other	-	-	-	-	-	-	-	-	-	-
Complications predominantly related to the puerperium (A34,O85-O92)	3.0	All	**	-	-	**	-	-	**	-	-	-
	2.6	White	**	-	-	-	-	-	**	-	-	-
	3.7	Black	**	-	-	**	-	-	-	-	-	-
		- Other	-	-	-	-	-	-	-	-	-	-
Obstetrical tetanus (A34)		- All	-	-	-	-	-	-	-	-	-	-
		- White	-	-	-	-	-	-	-	-	-	-
		- Black	-	-	-	-	-	-	-	-	-	-
		- Other	-	-	-	-	-	-	-	-	-	-
Obstetric embolism (O88)	1.5	All	**	-	-	**	-	-	-	-	-	-
		- White	-	-	-	-	-	-	-	-	-	-
	3.7	Black	**	-	-	**	-	-	-	-	-	-
		- Other	-	-	-	-	-	-	-	-	-	-
Other complications predominately related to the puerperium (O85-O87,O89-O92)	1.5	All	**	-	-	-	-	-	**	-	-	-
	2.6	White	**	-	-	-	-	-	**	-	-	-
		- Black	-	-	-	-	-	-	-	-	-	-
		- Other	-	-	-	-	-	-	-	-	-	-
All other direct obstetric Causes (O10,O12,O21-O43,O47-O66,O68-O71,O73-O75)	3.0	All	**	-	-	-	**	-	**	-	-	-
	2.6	White	**	-	-	-	-	-	**	-	-	-
	3.7	Black	**	-	-	-	**	-	-	-	-	-
		- Other	-	-	-	-	-	-	-	-	-	-
Obstetric death of unspecified cause (O95)		- All	-	-	-	-	-	-	-	-	-	-
		- White	-	-	-	-	-	-	-	-	-	-
		- Black	-	-	-	-	-	-	-	-	-	-
		- Other	-	-	-	-	-	-	-	-	-	-
Indirect obstetric deaths (O98-O99)		- All	-	-	-	-	-	-	-	-	-	-
		- White	-	-	-	-	-	-	-	-	-	-
		- Black	-	-	-	-	-	-	-	-	-	-
		- Other	-	-	-	-	-	-	-	-	-	-

*Rate per 100,000 live births. Rates are unstable to small frequency of occurrence.

**** in cell indicates count is greater than 0 and less than 5